Here is some information from VA Manual.

1. **Soil permeability**

The soil types within the subsoil profile, extending a minimum of 3 feet below the bottom of the facility, should be identified to verify the ***infiltration rate*** or ***permeability*** of the soil. The infiltration rate, or permeability, measured in inches per hour, is the rate at which water passes through the soil profile during saturated conditions. Minimum and maximum infiltration rates establish the suitability of various soil textural classes for infiltration. Each soil texture and corresponding hydrologic properties within the soil profile are identified through analysis of a gradation test of the soil boring material. **Soil textures acceptable for use with infiltration systems include those with infiltration rates between 0.52 inches per hour and 8.27inches per hour, and include loam, sandy loam, and loamy sand**.

TABLE 3.10 - 2
Hydrologic Soil Properties Classified by Soil Texture

Texture Class	Effective Water Capacity (C_w) (inch per inch)	Minimum Infiltration Rate (f) (inch per hour)	Hydrologic Soil Grouping
Sand	0.35	8.27	A
Loamy Sand	0.31	2.41	A
Sandy Loam	0.25	1.02	B
Loam	0.19	0.52	B
Silt Loam	0.17	0.27	C
Sandy Clay Loam	0.14	0.17	C
Clay Loam	0.14	0.09	D
Silty Clay Loam	0.11	0.06	D
Sandy Clay	0.09	0.05	D
Silty Clay	0.09	0.04	D
Clay	0.08	0.02	D

Virginia Stormwater Management Handbook

First Edition
1999

VOLUME I

Virginia Department of Conservation and Recreation
Division of Soil and Water Conservation